

REPRESENTATIONS FOR ESTIMATING DISTANCE

Philip N. Klein

ABSTRACT OF THE DISCLOSURE

[00148] In one aspect, a method and system are provided for preprocessing a weighted planar undirected graph and representing the results of the preprocessing so as to facilitate subsequent approximate distance queries. A representation can be constructed so that an approximate distance from one node to another can be computed quickly. Also, the representation in one embodiment stores information for computing distances in a relatively compact format, thus reducing memory requirements. In another aspect, a method and system are provided which use the representation for rapid computation of distances.

DRAFT - NOT FOR FILING